

PATENT
P55890A

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:

SUNG-KOOG OH, et al.

#2
PLW
423-02

jc872 U.S. PTO
10/059342
01/31/02

Serial No.: *to be assigned*

Examiner: *to be assigned*

Filed: 31 January 2002

Art Unit: *to be assigned*

For: OPTICAL FIBER PREFORM MANUFACTURING METHOD FOR SHRINKAGE
AND CLOSING OF DEPOSITED TUBE (as amended)

INFORMATION DISCLOSURE STATEMENT

Assistant Commissioner
for Patents
Washington, D.C. 20231

Sir:

In accordance with 37 C.F.R. §1.56, and §§1.97 and 1.98 as amended, Applicant cites, and discusses the following art references:

1. U.S. Patent No. 3,982,916 to Miller, entitled *METHOD FOR FORMING OPTICAL FIBER PREFORM*, issued on September 28, 1976;
2. U.S. Patent No. 4,154,591 to French *et al.*, entitled *FABRICATION OF OPTICAL FIBERS WITH IMPROVED CROSS SECTIONAL CIRCULARITY*, issued on May 15, 1979;

3. U.S. Patent No. 4,636,236 to Glessner *et al.*, entitled *METHOD FOR PRODUCING A PREFORM FOR DRAWING OPTICAL FIBERS*, issued on January 13, 1987;
4. U.S. Patent No. 4,820,322 to Baumgart *et al.*, entitled *METHOD OF AND APPARATUS FOR OVERCLADDING A GLASS ROD*, issued on April 11, 1989;
5. U.S. Patent No. 5,658,363 to Ince *et al.*, entitled *METHOD OF JOINING A TUBE TO A ROD HAVING AN ANNULAR RIB, SO AS TO FORM AN OPTICAL FIBER PREFORM*, issued on August 19, 1997;
6. U.S. Patent No. 5,917,109 to Berkey, entitled *METHOD OF MAKING OPTICAL FIBER HAVING DEPRESSED INDEX CORE REGION*, issued on June 29, 1999;
7. U.S. Patent No. 5,090,978 to O'Brien, Jr., entitled *METHODS OF COLLAPSING GLASS TUBE*, issued on February 25, 1992; and
8. U.S. Patent No. 4,822,399 to Kanamori *et al.*, entitled *GLASS PREFORM FOR DISPERSION SHIFTED SINGLE MODE OPTICAL FIBER AND METHOD FOR THE PRODUCTION OF THE SAME*, issued on April 18, 1989.

A brief summary of these patents is as follows:

Miller '916 describes a process for manufacturing preforms using chemical vapor deposition by a collapsing of the preform. A horizontal lathe is illustrated.

French et al. '591 describe a method of collapsing a preform performed by modified chemical vapor deposition on a horizontal or vertical lathe. The collapse is performed with positive pressure injected into the tube.

Glessner et al. '236 describes collapsing a tube formed by a chemical vapor deposition while maintaining a partial vacuum in the tube. As illustrated, the vacuum appears to be applied to the upper end of the tube.

Baumgart et al. '322 describes a method and apparatus for collapsing a tube onto a rod to form a preform. Illustrated apparatus as a vertical rave and vacuum applied to the bottom of the tube.

Ince et al. '363 describes a method for manufacturing a preform comprising collapsing a tube onto a rod with suction applied to the angular space between the tube and the rod.

Berkey '109 describes a method of making an optical fiber preform in which a tube is collapsed onto a core rod with vacuum applied to the upper portion of the tube.

O'Brien, Jr. '978 discloses a method of facilitating collapse of an optical preform tube into a preform from which optical fiber is drawn.

Kanamori et al. '399 discloses a glass preform for use in the fabrication of a dispersion shifted single mode optical fiber and a method for the production of said glass preform.


The citation of the foregoing references is not intended to constitute an assertion that other or more relevant art does not exist. Accordingly, the Examiner is requested to make a wide-ranging and thorough search of the relative arts.

In accordance with 37 C.F.R. §1.98 (d), the earlier application, Serial No. 09/457,392 filed

9 December 1999, is properly identified in the Information Disclosure Statement, and is relied on for an earlier effective filing date under 35 U.S.C. §120, and the Information Disclosure Statement submitted in the earlier application, Serial No. 09/457,392 filed on 9 December 1999 complies with paragraphs of 37 C.F.R. §1.98(a) through (c). Therefore, copies of references cited in this Information Disclosure Statement are not provided herewith.

No fee is incurred by this Statement.

Respectfully submitted,


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INFORMATION DISCLOSURE STATEMENT

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APPLICANT

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GROUP

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U.S. PATENT DOCUMENTS

EXAMINE	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE
	3,982,916	9/76	Miller			
	4,154,591	5/79	French et al.			
	4,636,236	1/87	Glessner et al.			
	4,820,322	4/89	Baumgart et al.			
	5,658,363	8/97	Ince et al.			
	5,917,109	6/99	Berkey			
	5,090,978	2/92	O'Brien, Jr.			
	4,822,399	4/89	Kanamori et al.			

FOREIGN PATENT DOCUMENTS

TRANSLATION

DOCUMENT NUMBER	DATE	COUNTRY	CLAS	SUBCLASS	YES	NO

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, etc.)

EXAMINER:

DATE CONSIDERED: